Claims

What is claimed is:

1.   A method of monitoring a distributed application including one or more transactions on a network having an infrastructure, the method comprising:

generating a transactional path for one of the transactions,

associating metrics relating to the network infrastructure with the transactional path, and

providing information about the transaction to a user, based at least in part on the association between the transactional path and the metrics relating to the network infrastructure.

2.   The method of claim 1, wherein the generating step comprises identifying software components of the transaction.

3.   The method of claim 2, wherein the generating step comprises identifying dependencies between the software components of the transaction.

4.   The method of claim 3, wherein the identifying dependencies step comprises unpacking and analyzing files that identify the software components of the transaction.

5.   The method of claim 4, wherein the files include an Enterprise Archive (EAR) file.

6.   The method of claim 4, wherein the files include a Web Application Archive (WAR) file.

7.   The method of claim 4, wherein the files include an Enterprise Java Bean (EJB) Java Archive (JAR) file.

8.   The method of claim 3, wherein the identifying dependencies step comprises

analyzing the software components of the transaction to identify direct and indirect caller

relationships between the software components of the transaction.

9.   The method of claim 8, wherein the analyzing software components step

comprises decompiling the software components of the transaction.

10.   The method of claim 1, wherein the generating step comprises identifying

infrastructure resources that may be used by the transaction.

11.   The method of claim 10, wherein the generating step comprises identifying

dependencies of software components of the transaction on the infrastructure resources

that may be used by the transaction.

12.   The method of claim 11, wherein the generating step comprises identifying

dependencies between the software components of the transaction.

13.   The method of claim 12, wherein the generating step comprises constructing a

dependency graph that identifies dependencies between the software components of the

transaction and between the software components of the transaction and the infrastructure

resources that may be used by the transaction.

14.   The method of claim 11, wherein the generating step comprises using deployment

information from the software components of the transaction to identify the dependencies

of the software components on the infrastructure resources that may be used by the

transaction.

15.   The method of claim 14, wherein the generating step comprises extracting

metadata about the software components of the transaction from deployment information.

16. The method of claim 11, wherein the identifying dependencies step comprises unpacking and analyzing files that identify the software components of the transaction.

17. The method of claim 16, wherein the files include an Enterprise Archive (EAR) file.

18. The method of claim 16, wherein the files include a Web Application Archive (WAR) file.

19. The method of claim 16, wherein the files include an Enterprise Java Bean (EJB) Java Archive (JAR) file.

20. The method of claim 1, wherein the providing information step comprises providing business relevant information about execution of the transaction to the user.

21. The method of claim 20, wherein the business relevant information includes a notification of the transaction taking more than a threshold time to execute.

22. The method of claim 20, wherein the business relevant information includes notification of infrastructure resources that may be used by the transaction being unavailable.

23. The method of claim 22, wherein the business relevant information includes notification of how unavailability of ones of the infrastructure resources that may be used by the transaction may effect performance of the transaction.

24. The method of claim 20, wherein the business relevant information includes which of the one or more transactions may be effected by unavailability of ones of the infrastructure resources that may be used by the one or more transactions.

25. The method of claim 1, wherein the providing information step comprises displaying an observation message to the user based on the occurrence of a condition.

26.   The method of claim 25, wherein the observation message is user-defined.

27.   The method of claim 25, wherein the condition is user-defined.

28.   A method of generating a transactional path for a distributed application, the method comprising:

decomposing the distributed application into a set of software components;

determining infrastructure dependencies of each software component in the set of software components;

analyzing each software component in the set of software components to determine relationships to other software components in the set of software components;

merging the infrastructure dependencies and the relationships into a dependency graph that represents at least one transactional path for the distributed application; and

selecting a transaction path from the dependency graph.

29.   The method of claim 28, wherein the determining infrastructure dependencies step comprises using deployment information from the software components to identify the infrastructure dependencies of the software components.

30.   The method of claim 29, wherein the determining infrastructure dependencies step comprises extracting metadata about the software components from the deployment information.

31.   The method of claim 28, wherein the decomposing step comprises unpacking and analyzing files that identify the software components.

32.   The method of claim 31, wherein the files include an Enterprise Archive (EAR) file.

33.   The method of claim 31, wherein the files include a Web Application Archive (WAR) file.

34.   The method of claim 31, wherein the files include an Enterprise Java Bean (EJB) Java Archive (JAR) file.

35.   A system for monitoring a distributed application including one or more transactions on a network having an infrastructure, the system comprising:

        A computer that executes programmed instructions that cause the computer to associate metrics relating to network infrastructure with a transactional path, and to provide information about a transaction to a user, based at least in part on the association between the transactional path and the metrics.

36.   The system of claim 35, wherein the programmed instructions further cause the computer to provide business relevant information about execution of the transaction to the user.

37.   The system if claim 35, wherein the programmed instructions further cause the computer to display an observation message to the user based on the occurrence of a condition.